



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,083	03/12/2004	Charles S. Schasteen	048968-117958	8520
27148 7590 09/30/2008 POLSINELLI SHALTON FLANIGAN SUELTHAUS PC 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112-1802				
EXAMINER FORD, VANESSA L				
ART UNIT 1645		PAPER NUMBER		
MAIL DATE 09/30/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/799,083

**Applicant(s)**

SCHASTEEN ET AL.

**Examiner**

VANESSA L. FORD

**Art Unit**

1645

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 19-102 is/are pending in the application.
- 4a) Of the above claim(s) 1, 7, 14-16, 19-22 and 27-101 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6, 8-13, 23-26 and 102 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**FINAL ACTION**

1. This Office Action is responsive to Applicant's amendment and responses filed August 10, 2007 and November 7, 2007. Claim 102 has been added.

Claim 1, 7, 14-16, 19-22, and 27-101 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 16, 2007.

Claims 2-6, 8-13, 23-26 and 102 are under examination.

***Rejection Withdrawn***

2. In view of Applicant's amendment and remarks the following rejections are withdrawn.

- (a) rejection of claim 9 under 35 U.S.C. 112, second paragraph, page 4, paragraph 5.
- (b) rejection of claims 5-6 and 17-18 under 35 U.S.C. 112, second paragraph, page 5, paragraph 6.

***Rejection Maintained***

3. The following objections to the specification are maintained.
- (a) the objection to the specification, page 3, paragraph 2.
  - (b) the objection to the specification, page 4, paragraph 3.
  - (c) the objection to the specification, page 4, paragraph 4.

The objections are reiterated below:

### ***Specification***

The use of the trademarks have been noted in this application. See for example, pages 28 or 45. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. The specification should be reviewed for these types of informalities and correction is required.

The specification is objected to for the following informality: the reference to the article in *Parasitology* 73:311-326 should be "Ryley" et al instead of "Ryler et al." See page 17. The specification should be reviewed for these types of informalities and correction is required.

The specification is objected to for the following informality: the specification recites "4□ C" . See page 34. It is unclear what Applicant intends. Does Applicant intend "4°C". The specification should be reviewed for these types of informalities and correction is required.

### **Applicant's Arguments**

Applicant urges that the specification has been amended to correct the Trademarks, symbols and errors in the instant specification.

### **Examiner's Response to Applicant's Arguments**

Applicant's arguments filed August 10, 2007 have been fully considered but they are not persuasive.

Applicant's amendments to the paragraphs of the specification do not correspond to the specification paragraphs of record. In other words, the paragraph numbers recited in the amendment filed August 10, 2007 do not correspond to the paragraph numbers of the instant specification. Applicant's paragraph numbers recited

in the amendment filed August 10, 1008 appear to correspond to the paragraph numbers in the published patent application( i.e. PGPub). Applicant should amend the specification such that the paragraph numbers correspond to the paragraph numbers of the specification of record. Therefore, the objections to the specification are maintained.

4. The rejection of claims 2-6, 8-10 and 23-26 under 35 U.S.C. 103(a), is maintained for the reasons set forth on pages 5-7 paragraph 7 of the previous Office Action.

The rejection is reiterated below:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6, 8-10 and 23-26 are rejected under 35 U.S.C. 103(a) as unpatentable over Conkle et al (*WO 00/50072 published August 31, 2000*) in view of Singh et al (*Cereal Chemistry*, 72(4):344-348, 1995).

Claims are drawn to a method of separating or isolating oocysts from a liquid suspension by the use of a hydrocyclone.

Conkle et al teach methods of isolating and separating oocysts from Eimeria species (oocysts known to cause coccidiosis) (see the Abstract). Conkle et al teach that encysted protozoa (oocysts) are obtained from feces, the suspensions or slurries can include significant amounts of undesirable suspended solids (pages 4-5). Conkle et al teach that the encysted protozoa require centrifugation and concentration of the protozoa (page 6). Conkle et al teach that the suspensions can include from about 1 up to about 20 weight percent solid or feces (page 5). Conkle et al teach that the separation methods of the invention include dense salt solutions including water and sodium chloride (page 5). Conkle et al teach that encysted protozoa need to be

Art Unit: 1645

separated from suspension to achieved at least 70% encysted protozoa recovery (page 5). Conkle et al teach that encysted protozoa can be recovered or separated by salt flotation or gas flotation (page 5). Conkle et al teach that using salt flotation results in about 80 to 95 percent recovery (page 5). Conkle et al teach that the use of gas flotation results in about 20 to 90 percent recovery of encysted protozoa (page 7). However, Conkle et al teach that that gas flotation process rejects about 20 to 90 percent of encysted protozoa (page 7). Conkle et al teach that a need exists for a more efficient vaccination method (page 2). Conkle et al teach that this need would use other techniques to eliminate hazardous chemical such as potassium dichromate in processing the protozoa included in compositions used to vaccinate animals (page 2). Conkle et al teach that the methods of the invention are used to produce vaccines against avian coccidiosis (see the Abstract). Thus, Conkle et al teach the claim limitation that the host animals are from the class Aves.

Conkle et al do not teach hydrocyclones.

Singh et al teach a method of using hydrocyclones in separation processes (see the Abstract). Singh et al teach disclosed the use of the Doxie Type A single hydrocyclone (see the Abstract). Singh et al teach using hydrocyclones in separation processes increased the yield of product (see the Abstract). Singh et al also teach that using hydrocyclones reduced the amount of time of the separation process (see the Abstract). Singh et al teach that hydrocyclones eliminated the requirement of a large floor area, reduced the potential for error and more closely simulated the separation processes used in industrial operations (see the Abstract). Claim limitations such as density and appearance of the oocysts would be necessarily taught by the prior art references since oocysts are encysted from *Eimeria*. Claim limitations such as specific density ranges would be a matter optimizing experimental parameters.

It would be *prima facie* obvious at the time the invention was made to modify the separation and isolation procedures as taught by Conkle et al to use hydrocyclones because Singh et al teach using hydrocyclones in separation processes increased the yield of product, reduced the amount of time of the separation process and eliminated the requirement of a large floor area. It would be expected absent evidence to the contrary that the used on hydrocyclones in a method of isolating and separating encysted protozoa (oocysts from *Eimeria*) would be effective at reducing the potential for error and more closely simulated the separation processes used in industrial operations.

#### Applicant's Arguments

- A) Applicant urges to establish a case of *prima facie* obviousness, (a) the art must teach or suggest all claim limitations, (b) there must be suggestion or motivation in the

art to modify the reference and (c) there must be a reasonable expectation of success.

Applicant urges that no case of *prima facie* obviousness has been established.

B) Applicant urges that Conkle et al disclose a method of separating and isolating *Eimeria* oocysts using centrifugation. Applicant urges that Conkle et al do teach or suggest the use of hydrocyclone to separate and isolate oocysts. Applicant urges that Singh et al use hydrocyclones to separate starch particles. Applicant urges that nowhere does Singh et al teach the separation and isolation of oocysts using hydrocyclones.

C) Applicant urges that the prior art teaches away from the use of hydrocyclones to separate live cells. Applicant refers to U.S. Patent No.5,547,868 to support their position. Applicant urges that the use of hydrocyclone would damage live oocysts and would not be appropriate for separating live cells.

D) Applicant urges that since separating of oocysts and the use of hydrocyclone is known in the prior art, the Examiner is applying hindsight reconstruction.

#### Examiner's Response to Applicant's Arguments

A) Applicant's arguments filed August 10, 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that no case of *prima facie* obviousness has been established, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Conkle et al teach a method of separating and isolating oocysts from the genus *Eimeria*. Conkle et al do not teach the use of hydrocyclones but suggest the use of other methods of processing oocysts to eliminate the use of harsh chemicals such as potassium dichromate. Singh et al teach a method of using hydrocyclones in separation processes and disclosed the use of the Doxie Type A single hydrocyclone. One of ordinary skill would be motivated to use hydrocyclones over convention methods of separating and isolating oocysts because Singh et al teach using hydrocyclones in separation processes increases the yield of product, reduces the amount of time of the separation process and does not require chemicals such as potassium dichromate. Thus, a case *prima facie* obviousness has been established.

Additionally, *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), discloses that if a technique has been used to improve one method, and a person of ordinary skill would recognize that it would be used in similar methods in the same way, using the technique is obvious unless its application is beyond that person's skill. *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) also discloses that "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results". It well known in the art to separate and isolate oocysts. It is well known in the art that separation and isolation processes



often use hazardous chemicals such as potassium dichromate in these processes.

The prior art recognizes that there is a need to improve these processes by eliminating the use of such chemicals. See Conkle et al. The prior art recognizes that the use of hydrocyclones is a method to separate materials. See Singh et al. Thus, it would be obvious to apply a known technique to a known product to be used in a known method that is ready for improvement to yield predictable results. Thus, the combination of prior art references as combined provided a *prima facie* case of obviousness absent convincing evidence to contrary.

B) To address Applicant's comment's regarding Conkle et al and Singh et al, it should be noted that Conkle et al and Singh et al need not individually teach the claimed invention. It should be noted that it is the combination of prior art references that would allow the artisan of ordinary skill to arrive at the claimed invention. As stated above, Conkle et al teach a method of separating and isolating oocysts from the genus *Eimeria*. Conkle et al makes a suggestion that other processes of separating and isolating should be used to eliminate the use of hazardous chemicals such as potassium dichromate. Singh et al teach the use of hydrocyclones in separation processes. Therefore, it is known in the art that hydrocyclones are used to separate materials. Thus, One of ordinary skill in the art would have been motivated to use hydrocyclones in a method of separating and isolating oocysts because hydrocyclones increase the yield of the product, reduces processing time (see Singh et al) and does not require chemicals such as potassium dichromate. Therefore, the combination of references teach the claimed invention.

C) To address Applicant's comments regarding the prior art teaching away from using hydrocyclones to separate live cells, it should be noted that U.S. Patent No. 5,547,858 does not teach away from using hydrocyclones to separate and isolate live cells. In fact, the Patent embraces the use on hydrocyclones to separate and isolate materials from bacterial cells.

U.S. Patent 5,547,858 discloses that " As a result of extensive investigations to solve the foregoing problems, the present inventors have found that by applying a liquid cyclone to a solution containing both crystals and cells, *the crystals can be efficiently concentrated and isolated by the ability of classification of the liquid cyclone and at the same time, the cells having a diameter smaller than that of the crystals, which are considered difficult to apply the liquid cyclone thereto, can be efficiently selected from a concentrated solution of the crystals.*

Accordingly, one object of the invention is to provide a method for purification of an amino acid, a nucleic acid or a derivative thereof comprising treating a crystal slurry containing not greater than 10 wt % of cells having a diameter of not greater than 5 .mu.m on a dry weight basis, and 5 to 60 wt % of crystals of an amino acid, a nucleic acid or derivatives thereof, having a diameter of 10 to 2000 .mu.m, with a liquid cyclone which has a representative diameter capable of sufficiently increasing the concentration of the crystals at the downstream side and, if necessary, applying a back pressure to the downstream side to recover a concentrated solution of crystals having 30 to 90 wt % at the downstream side and select not less than 50% of the cells at the upstream side".

U.S. Patent No. 5,547,858 teaches that cells can be separated from the solution of crystals. Thus, hydrocyclones can be used to separate and isolate bacterial cells. It should be noted that the claims do not recite that the oocysts are live.

D) In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In view of all of the above, this rejection is maintained.

5. The rejection of claims 11-13 under 35 U.S.C. 103(a), is maintained for the reasons set forth on pages 7-8 paragraph 8 of the previous Office Action.

The rejection is reiterated below:

Claims 11-13 are rejected under 35 U.S.C. 103(a) as unpatentable over Conkle et al and Singh et al as applied to claims 2-6, 8-10, and 23-26 and further in view of Sjoerdsma et al (*U.S. Patent No. 4,399,151 published August 16, 1983*).

The teachings of Conkle et al and Singh et al have been described previously. Conkle et al and Singh et al et al do not teach the use of screens.

Sjoerdsma et al teach that mesh screens can be used to extract debris from biological material (Example 6, column 24).

It would have been *prima facie* obvious at the time the invention was made to include a mesh screen in the method of Conkle et al and Singh et al as combined above because Sjoerdsma et al demonstrate that mesh screens are effective at separating debris or contaminants from biological material. It would be expected that using mesh screens would be an effective way to eliminate contamination from oocysts.

#### Applicant's Arguments

Applicant urges that the defect of the Office's obviousness rejection is not cured by Sjoerdsma et al. Applicant urges that this reference does not teach or disclose the use of hydrocyclones to separate or isolate oocysts. Applicant urges that the reference discloses that mesh screens can be used to extract debris from biological matters.

#### Examiner's Response to Applicant's Arguments

Applicant's arguments filed August 10, 2007 have been fully considered but they are not persuasive.

As stated above, Conkle et al teach a method of separating and isolating oocysts from the genus *Eimeria*. Conkle et al makes a suggestion that other processes of separating and isolating should be used to eliminate the use of harsh chemicals such as potassium dichromate. One of ordinary skill in the art would have been motivated to use hydrocyclones in a method of separating and isolating oocysts because hydrocyclones increase the yield of the product, reduces processing time and does not require chemicals such as potassium dichromate. Conkle et al nor Singh et al teach the use of mesh screens. However, Sjoerdsma et al teach that mesh screens can be used to extract debris from biological material (Example 6, column 24). One of ordinary skill in the art would be motivated to include a mesh screen in the method of Conkle et al and Singh et al as combined above because demonstrate that mesh screens are effective at separating debris or contaminants from biological material.

Additionally, *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), discloses that if a technique has been used to improve one method, and a person of ordinary skill would recognize that it would be used in similar methods in the same way, using the technique is obvious unless its application is beyond that person's skill. *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) also discloses that "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results". It well known in the art to separate and isolate oocysts. It is well known in the art that separation and isolation processes

often use hazardous chemicals such as potassium dichromate in these processes. The prior art recognizes that there is a need to improve these processes by eliminating the use of such chemicals. See Conkle et al. The prior art recognizes that the use of hydrocyclones is a method to separate materials. See Singh et al. It well known in the art to separate biological matter using mesh screens. See Sjoermdsma et al. Thus, it would be obvious to apply a known technique to a known product to be used in a known method that is ready for improvement to yield predictable results. Thus, the combination of prior art references as combined provided a *prima facie* case of obviousness absent convincing evidence to contrary.

***New Ground of Rejection***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 102 is rejected under 35 U.S.C. 103(a) as unpatentable over Conkle et al (*WO 00/50072 published August 31, 2000*) in view of Singh et al (*Cereal Chemistry*, 72(4):344-348, 1995) as applied to claims 2-6, 8-10 and 23-26 above and further in view of Kimura et al (*Journal of Protozoology Research*, July 2000, Vol. 10, No.3, pp. 155-165) (*Abstract only*).

Claim 102 is drawn to the method of claim 6 wherein the dense aqueous liquid is selected from the group consisting of sucrose and fructose corn syrup.

The teachings of Conkle et al and Singh et al have been described previously.

Conkle et al and Singh et al do not teach the claim limitation "the method of claim 6 wherein the dense aqueous liquid is selected from the group consisting of sucrose and fructose corn syrup".

Kimura et al teach a flotation technique using sucrose (see the Abstract). Kimura et al teach that the sucrose flotation technique is a fast one-step, simple and inexpensive method that allows from the separation and recovery of oocysts (see the Abstract).

It would be *prima facie* obvious at the time the invention was made to modify the separation and isolation procedures as taught by Conkle et al to use the hydrocyclones as taught by Singh et al and the sucrose flotation technique as taught by Kimura et al because Singh et al teach using hydrocyclones in separation processes increases the yield of product, reduces the amount of time of the separation process and does not require chemicals such as potassium dichromate and Kimura et al teach that the sucrose flotation technique is a fast one-step, simple and inexpensive method that allows from the separation and recovery of oocysts. It would be expected, absent evidence to the contrary, that the use of hydrocyclones and sucrose flotation in a method of separating and isolating oocysts would be a fast, effective way to isolate and separate encysted protozoa (oocysts from *Eimeria*) without the use of hazardous chemicals.

Additionally, *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), discloses that if a technique has been used to improve one method, and a person of ordinary skill would recognize that it would be used in similar methods in the same way, using the technique is obvious unless its application is beyond that person's skill. *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) also discloses that "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results". It well known in the art to separate and isolate oocysts. It is well known in the art that separation and isolation processes often use hazardous chemicals such as potassium dichromate in these processes. The prior art recognizes that there is a need to improve these processes by eliminating the use of such chemicals. See Conkle et al. The prior art recognizes that the use of hydrocyclones is a method to separate materials. See Singh et al. It well known in the art to separate biological matter using mesh screens. See Sjoerdsma et al. It is known in the art to use sucrose flotation to separate and isolate oocysts. See Kimura et al. Thus, it would be obvious to apply a known technique to a known product to be used in a known method that is ready for improvement to yield predictable results. Thus, the combination of prior art references as combined provided a *prima facie* case of obviousness absent convincing evidence to contrary.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Status of Claims***

8. No claims are allowed.

#### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa L. Ford whose telephone number is (571) 272-0857. The examiner can normally be reached on 9 am- 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Mondesi can be reached on (571) 272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vanessa L. Ford/  
Patent Examiner, Art Unit 1645  
September 9, 2008

/N. M. Minnifield/  
Primary Examiner, Art Unit 1645